

thing under us, that was to be taken up. And by the return of the Air-Barrels, I often sent up Orders, written with an Iron Pen on small Plates of Lead, directing how to move us from Place to Place as occasion required. At other times when the Water was troubled and thick, it would be dark as Night below; but in such Case. I have been able to keep a Candle burning in the Bell as long as I pleas'd, notwithstanding the great expence of Air requisite to maintain Flame

This I take to be an Invention applicable to various Uses; such as *Fishing for Pearl*, *Diving for Coral*, Spunges and the like, in far greater Depths than has hitherto been thought possible. Also for the fitting and plaining of the Foundations of Moles, Bridges, &c. upon Rocky Bottoms; and for the cleaning and scrubbing of Ships Bottoms when foul, in calm Weather at Sea. But as I have no experience of these matters, I leave them to those that please to try. I shall only intimate, that by an additional Contrivance, I have found it not impracticable for a Diver to go out of our Engine, to a good distance from it, the Air being conveyed to him with a continued Stream by small flexible Pipes; which Pipes may serve as a Clew to direct him back again, when he would return to the Bell. But of this perhaps more hereafter

VIII. *Observations on the Glands in the Human Spleen; and on a Fracture in the upper part of the Thigh-bone.* By J. Douglass, M.D. and R. S. S.

THAT Anatomy, as well as Physick and Surgery, has received much improvement from a careful and true observation of what was found in the Dissection of morbid

morbid Bodies, will appear from the two following Instances, among many more that might be adduced for that purpose. For it is certain, that nothing has contributed so much towards forming a right Notion of the Nature of the several Diseases, and a true knowledge of the Structure of many Parts of the Human Body, as their appearance in a preternatural State.

My first Observation is of the Glands visible to the naked Eye, that appear dispersed thro' the Fibrous Substance of the Human Spleen. The Subject I found them in, was a Boy of about 4 or 5 Years Old, that died of a general *Atrophy*, or Consumption of all the Muscular Flethy Parts of the Body, occasioned without all doubt from the numerous Glandulous Swellings scattered up and down the whole Mesentery; which by compressing the Lymphatick Vessels, called in this place *Vasa lactea*, prevented the access and supply of the Chyle, so necessary for the continued nourishment and increase of the Parts. For without the constant Recruit of this whitish Balsamick Liquor, the Mass of Blood will in a short time be unfit to perform any of those good Offices, which a fresh accession of Chyle qualifies it for.

In a piece of this Spleen we might see, without the assistance of a Glass, several round whitish Bodies of a pretty hard Consistence, and abundance of small white and softer specks; but both of the same nature. These, to me at least, appear to be so many distinct Glands become visible; which in a Natural State are only to be seen by a fine Glass, as the curious *Malpighius* first observed. *Vid. his Treatise de Liene, Cap. V. De quibusdam corporibus per Lienem dispersis. Minime hæ glandule, says he, non æque facile sese produnt in quocunque animalium Liene: imo solâ Lienis laceratione innotescunt in Bove, Ove, &c. In Homine vero difficiliter emergunt: si tamen ex morbo universum glandularum genus targeat, manifestiores residentur, aucta ipsarum*

ipsarum magnitudine, ut in defuncta puella observavi : in quâ Lien globulis conspicuis racematim dispersis totus scatebat.
Which Case was the very same with mine.

The second Observation. We had still been in the Dark, about the nature of a Luxation of the Head of the Thigh Bone, had we not carefully examined the Part in the dead Body. For by that sort of enquiry, the common mistake of Surgeons was detected, and what was esteemed and treated by them as a Luxation of the Head of the *Femur*, was discover'd to be nothing else but a Fracture of the same Bone, near its Neck; the globular Head being still retained close in its own Socket, called the *Acetabulum Coxendicis*.

Amongst all the Writers of Surgery and Anatomy, I know but three that were apprised of this mistake: the first was *Ambrose Paree*, the second Dr. *Ruyseh* at *Amsterdam*, and Mr. *Chefelden*, a Member of the *Royal Society*; whose Observations on this Subject I intend to communicate at another time, together with an account of the true Structure of this Joint; in which I will consider the depth of the Articulation; the wonderful strength of the Muscles that surround it; the many strong ligaments that bind the Head within the Socket; the smallness of the Neck of the Bone; its poreous and spongy Substance, which makes it much weaker than the rest; and last of all the disadvantageous oblique position of this Neck, which exposes it the more to outward accidents. From a review of such like Considerations, it will plainly appear that a Fracture can much more easily happen, than a Dislocation in that Part from an external Cause.

This *Os femoris* belonged to an old Woman turn'd of Four-score, who only fell from her Chair whereon she was sitting, and thereby suffered this breach of continuiry in the Substance of the Bone. She lived three Weeks after it; and tho' it never was reduc'd, yet she complain'd of

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very little or no pain, which may seem very extraordinary. It is observable that the Fracture is not only Oblique, near the Neck of the Bone; but that each *Trochanter*, i.e. the two *processes* near its *Cervix*, are likewise broke short off; and that they were both drawn up almost as high as the Head of the Bone it self, by the strong contraction of the *Glutei* and other Muscles.

IX. *An Account of a Book.* DISSERTATIO de DE A S A L U T E, In qua illius Sym-bola, Tempia, Statuæ, Nummi, Inscriptio-nes exhibentur, illustrantur. Auctore Guil-helmo Musgrave G. F. è Coll. Exon. Oxonii: Typis Leon. Lichfield: Impensis Phil. Yeo, Bib-liopolæ Exon. Anno MDCCXVI.

THE Author of this Treatise, as the occasion of it, observes that the little God *Telephorus* had just cause to complain, that so much respect was paid to *Dea Febris*, and a Book lately publisht *de Dea Pedagra*, yet no such Honour was done his Mother *Υγίεια*, (who certainly was more to be esteemed, than all the Tribes of Diseases). Upon this Conceit, he took what Books he had in his reach, of the antient Latin and Greek, and having collected out of them, what he met with relating to this Goddess, put it together, as now it appears in Print.

It consists of VI Chapters: of which the first is Introductory, speaks of Health in general, has, in praise of it, that memorable Ode of *Ariphron* the *Sicyonian*, publisht by *Athenæus*, and translated by *Sennertus*; together with a Hymn, said to be composd by *Orpheus*, on the same Subject;